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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/589,391	06/07/2000	Thaddeus John Gabara	1298/0F379	9139

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MENDELSON AND ASSOCIATES PC
1515 MARKET STREET
SUITE 715
PHILADELPHIA, PA 19102

EXAMINER

FAULK, DEVONA E

ART UNIT	PAPER NUMBER
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2644

DATE MAILED: 10/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/589,391

Applicant(s)

GABARA ET AL.

Examiner

Devona E. Faulk

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,8,9,11 and 15-18 is/are rejected.
- 7) ☒ Claim(s) 3,6,7,10, 12-14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 June 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 3,6,7,10, and 12-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1,2, 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Platt (US Patent 5,226,086) in view of Campbell et al. (US Patent 6,212,496).

Regarding claim 1, Platt discloses a method, apparatus, system and interface unit for programming a hearing aid comprising a hearing health professional at a remote location transmitting the audiogram information to a central office at another location (column 1, lines 8-14) (See Figure 1), which reads on "generating a command via a first computer at a first location"; communicating the information via the interface unit (20) or separately through the same communications medium (18), (column 9, lines 16-18) which reads on "transmitting the command to a second computer at a second location over a remote data link". Preferably the communication medium (18) is a conventional telephone system (column 9, line 50); transmitting through the computer (26) at the central office via modem (24), communication

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medium (18) and modem (22) the set of auditory characteristics back to the remote location through interface unit (20) which is couple to hearing aid (30), the hearing aid comprising a DSP (See Figure 1), which reads on "sending the command from the second computer to a digital signal processor in one of a telephone and the hearing aid". Although Platt teaches on the above elements, he fails to teach on outputting a test tone from the digital signal processor based on the output command to a user of the telephone wearing the hearing aid, and receiving a user response to the test tone over the remote data link and adjusting the hearing aid based on the user response to the test tone. However, the concepts of outputting a test tone from the digital signal processor based on the output command to a user of the telephone wearing the hearing aid, receiving a user response to the test tone over the remote data link and adjusting the hearing aid based on the user response to the test tone were well known in the art at the time of filing as taught by Campbell. Campbell discloses a method of customizing audio output to a user's hearing in a digital telephone comprising a user setting the user parameters in an audio test by responding to a series of tones produced by the cellular phone (column 1, line 57) which reads on "receiving a user response to the test tone over the remote data link"; the cellular phone generating test tones at successively lower amplitudes until the user does not indicate the user can hear the test tone (column 6, lines 6-9), which reads on "outputting a test tone from a digital signal processor based on the output command to a user of the telephone wearing the hearing aid" since the cellular phone includes a DSP(115) (See Figure 1). In another alternative implementation the components of the cellular phone interact with a hearing aid. In this case, the cellular phone transmits the adjusted signal to the hearing aid device which in turn plays the audio device through its own speaker (column 6, lines 38-41), which reads on adjusting the

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hearing aid based on the user response to the test tone". Hearing aids are essential to those who suffer from hearing loss since it is presently the only real option to regain that loss. Adjustment of hearing aids is well known in the art and with the continual advancement and improvement of technology it would have been foreseeable to come up with a method that would allow for remote adjusting of a hearing. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to replace Platt's conventional telephone with Campbell's digital cellular phone in order to provide a hearing aid that is customized to compensate for an individual's hearing spectrum.

Claim 2 claims the method of claim 1 wherein said command is a DTMF tone. DTMF or dual tone multi-frequency tones, also known as Touch Tone is used for telephone signaling over the line in the voice frequency band to the call-switching center. Today DTMF is used for most call setup to the telephone exchange, at least in the Western world. Touch-tone is common with conventional and cellular phones. Thus it is obvious that DTMF would be used as the method of telephone signaling.

Claim 4 claims the method of claim 1 wherein said receiving step comprises inputting a response to the command via a keypad on the telephone. As stated above apropos of claim 1, the combination of Platt and Campbell meet all elements of that claim. Therefore the combination is shown to meet all elements of claim 4 with the exception of inputting a response to the command via a keypad on the telephone. Campbell further teaches on a user control (125), such as a control on the exterior of the cellular phone, that provides user input to user parameter control circuit. It would have been obvious to one of ordinary skill in the art at the time of the invention to use Campbell's user control as the means for the user to respond.

Claim 5 claims the method claim 1 wherein said adjusting step comprises the steps of transmitting the user response to the first computer over the remote data link, retrieving a stored audiogram from memory based on the accuracy of the response, and uploading the audiogram into the hearing aid of the user over the remote data link. As stated above apropos of claim 1, the combination of Platt and Campbell meet all elements of that claim. Therefore the combination is shown to meet all elements of claim 5 with the exception of the above claimed elements. Platt teaches that the auditory characteristics received by interface unit (20) are then stored into memory of the hearing aid to complete the programming process (column 10, lines 10-13). All elements of claim 5 are comprehended by claim 1. Therefore claim 5 is rejected for reasons stated above apropos of claim 1.

3. Claims 8, 9, 11 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell et al. (US Patent 6,212,496). In view of Platt (US Patent 5,226,086).

Regarding claim 8, Campbell discloses a method of customizing audio output to a user's hearing in a digital telephone comprising a user setting the user parameters in an audio test by responding to a series of tones produced by the cellular phone (computer) (column 1, line 57) which reads on "receiving a user response to the test tone by the user"; the cellular phone generating test tones at successively lower amplitudes until the user does not indicate the user can hear the test tone (column 6, lines 6-9), which reads on "outputting a test tone from a digital signal processor based on the output command to a user of the telephone wearing the hearing aid" since the cellular phone includes a DSP (115) (See Figure 1) and "generating a command via a computer"; a memory (122) for storing the user parameters (column 2, line 43), which reads on "storing the response to the test tone by the user in the computer". In another

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alternative implementation the components of the cellular phone interact with a hearing aid. In this case, the cellular phone transmits the adjusted signal to the hearing aid device which in turn plays the audio device through its own speaker (column 6, lines 38-41), which reads on adjusting the hearing aid based on the user response to the test tone". Although Campbell teaches of a hearing aid, he does not teach of a hearing aid with a DSP in it. However the concept of a hearing aid with a DSP in it was well known in the art at the time of the invention as taught by Platt. Platt discloses a hearing aid (30) with a signal processor (34) (See Figure 1). Hearing aids are essential to those who suffer from hearing loss since it is presently the only real option to regain that loss. Adjustment of hearing aids is well known in the art and with the continual advancement and improvement of technology it would have been foreseeable to come up with a method that would allow for remote adjusting of a hearing. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to replace Campbell's hearing aid with Platt's hearing aid for the benefit of quickly adjusting a hearing aid.

Claim 9 claims the method of claim 8 wherein said command is a DTMF tone. DTMF or dual tone multi-frequency tones, also known as Touch Tone is used for telephone signaling over the line in the voice frequency band to the call-switching center. Today DTMF is used for most call setup to the telephone exchange, at least in the Western world. Touch-tone is common with conventional and cellular phones. Thus it is obvious that DTMF would be used as the method of telephone signaling.

Claim 11 claims the method of claim 8 wherein said receiving step comprises inputting a response to the command via a keypad on the telephone. As stated above apropos of claim 8, the combination of Campbell and Platt meet all elements of that claim. Therefore the

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combination is shown to meet all elements of claim 4 with the exception of inputting a response to the command via a keypad on the telephone. Campbell further teaches on a user control (125), such as a control on the exterior of the cellular phone, that provides user input to user parameter control circuit. It would have been obvious to one of ordinary skill in the art at the time of the invention to use Campbell's user control as the means for the user to respond.

Claim 15 claims the method of claim 8 wherein the response is stored in the first computer. As stated above apropos of claim 8, the combination of Campbell and Platt meet all elements of that claim. Therefore the combination is shown to meet all elements of claim 15 with the exception of the response is stored in the first computer. As stated above in apropos of claim 8, Campbell's phone has a memory (122) for storing the user parameters (column 2, line 43), which reads on "the response is stored in the first computer". Thus all elements of claim 15 are comprehended by claim 8. Therefore, claim 15 is rejected for reasons stated above apropos of claim 8.

Claim 16 claims the method of claim 8 wherein the response is stored in the second computer. As stated above apropos of claim 8, the combination of Campbell and Platt meet all elements of that claim. Therefore the combination is shown to meet all elements of claim 16 with the exception of the response is stored in the first computer. Platt further teaches that the earphone also has a memory (38) that stores the auditory characteristics received by the interface unit (column 10, line 13), which reads on "the response is stored in the second computer". Hence, the combination of Campbell and Platt also meet all elements of claim 17.

Claim 17 claims the method of claim 8 wherein the response is stored in the first and second computer. As stated above apropos of claim 8, the combination of Campbell and Platt

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meet all elements of that claim. Therefore the combination is shown to meet all elements of claim 17 with the exception of the response is stored in the first computer. Campbell's phone has a memory (122) for storing the user parameters (column 2, line 43), and Platt further teaches that the earphone also has a memory (38) that stores the auditory characteristics received by the interface unit (column 10, line 13), which reads on "the response is stored in the first and second computers". Hence, the combination of Campbell and Platt also meet all elements of claim 17.

Claim 18 claims the method of claim 8 wherein the digital signal processor is located in the hearing aid and step of sending the command to the digital signal processor is by a wireless link. As stated above apropos of claim 8, the combination of Campbell and Platt meet all elements of that claim. Therefore the combination is shown to meet all elements of claim 18 with the exception of the digital signal processor is located in the hearing aid and step of sending the command to the digital signal processor is by a wireless link. Campbell's phone is cellular and so it is interpreted that the communication using Campbell's method is wireless. Hence, the combination of Hence, the combination of Campbell and Platt also meet all elements of claim 17.

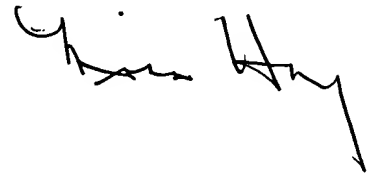
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devona E. Faulk whose telephone number is 703-305-4359. The examiner can normally be reached on 8 am - 5 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Isen can be reached on 703-305-4386. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

A handwritten signature in black ink, appearing to read "Minsun Oh Harvey", with a long, sweeping underline.

DF

**MINSUN OH HARVEY
PRIMARY EXAMINER**